

3.8 VISUAL QUALITY AND AESTHETICS

The proposed power plant would be built in an area primarily zoned for industrial use and already occupied by several industrial facilities, including the Hermiston Generating Plant and the Lamb-Weston potato processing plant. Additionally, mitigation measures (e.g., use of non-reflective and color treated materials, as well as shielding and directive devices for lighting) would reduce the visual prominence of the proposed power plant. Reconductoring of existing transmission lines without replacement of existing towers would be invisible to most observers. The short sections of new transmission line at the power plant site and near the McNary Substation are in areas where transmission towers are already abundant. Thus, the proposed project would be visually compatible with its surroundings. It would not result in the obstruction or degradation of any scenic viewsheds, including scenic and aesthetic resources designated in the pertinent comprehensive plans.

3.8.1 Affected Environment

The project site is located on the Umatilla Plain lowland. The Umatilla Plain is characterized by relatively flat to moderately rolling terrain, with elevations ranging from about 76 to 229 meters (250 to 750 feet) above Mean Sea Level (MSL). The terrain is primarily a mixture of grassland and agricultural land interspersed with occasional areas of small buttes and rock outcrops. Additionally, there are numerous small drainages (e.g., Umatilla River) and wetlands found throughout the plain. The Oregon Trail crosses the Plain several miles south of the project area. Mature trees and riparian vegetation are concentrated along the drainages and wetlands. Views within the plain are relatively open and expansive, interrupted only by slight changes in terrain, vegetation, and development. Due to the relatively large concentration of power generation facilities in the region, there are several large transmission lines traversing the landscape in the vicinity of the proposed project.

The Upper Columbia River area defines the northern boundary of the project site. The Columbia River defines the northern boundary of the Umatilla Plain and is one of the most identifiable landscape features in the Pacific Northwest region. The river varies from about 1.6 to 2.4 kilometers (0.5 to 1.5 miles) across and is bordered by smooth rounded hills along its banks. Several hydropower dams have converted the river into a series of long, narrow lakes, including the McNary Lock and Dam that is located near the north end of the proposed transmission line. Several large electric power transmission lines are located along the banks of the Columbia River. Large numbers of transmission towers are concentrated near the McNary Lock and Dam and the McNary Substation. The river has multiple uses including boating, fishing, wind surfing, and commercial

shipping. Views from the river corridor are relatively open and expansive up and down the river (primarily east and west), both at the water level and from the Umatilla Plain.

Moving southward, the elevations of the Umatilla plain gradually increase from 213 meters (700 feet) to 366 meters (1,200 feet) at the foot of the Blue Mountains, which defines the southerly edge of the Plain. The Blue Mountain range is located about 18 miles (29 kilometers) south of the power plant.

3.8.1.1 *Visual Characteristics of the Project Area*

Much of the proposed project area consists of open agricultural lands used for grazing and growing crops (e.g., peas, small grains, corn, etc.). More intense development is concentrated in Hermiston north of Interstate 84 and along Highway 395. It consists primarily of one- to two-story residential and commercial buildings, storage yards, stockyards, agricultural buildings, light industrial buildings, streets and parking lots, commercial signage, utility poles, and railroad tracks. Interstate 84 (I-84), Interstate 82 (I-82), and Highway 395 are the major roadways traversing the project area. The residences and highways offer the primary viewpoints from which the public has views of the proposed project.

South of I-84, the area is characterized predominantly by agricultural lands used for grazing and irrigated crops. Development is very limited and consists primarily of rural residences and farm buildings.

The dominant visual elements of the landscape at the proposed power plant site include the Hermiston Generating Plant, which is currently in operation, as well as two food processing plants, Lamb-Weston and Simplot. The Hermiston Generating Plant is a combined cycle power plant similar to the proposed power plant. Lamb-Weston and Simplot each consist of a complex of buildings and storage yards. Two other industrial stacks are visible.

The Lamb-Weston plant and the Hermiston Generating Plant are located together, east of Westland Road and 1.21 kilometers (0.75 miles) north of I-84. Simplot is located several miles to the east on Highway 207 and 1.21 kilometers (0.75 miles) north of I-84. The stacks and vapor plumes from these industrial uses are visible at various locations along I-84, I-82 and Highway 207. The two other industrial stacks are located east of Highway 395 near Stanfield and are visible from I-84 and Highway 395.

Other strong vertical elements in the project area include grain silos and other storage structures used for agricultural purposes, utility poles, water towers, and stands of trees

interspersed throughout the area. See also Section 3.11 for a discussion of land uses within 0.8 kilometers (0.5 mile) of the power plant site.

3.8.1.2 *Visual Resources in the Project Area*

Within the 8-kilometer (5-mile) radius of the proposed power plant site, the Umatilla County Scenic-Historic Road is the only identified visual resource from which the power plant might be visible. The Umatilla County Scenic-Historic Road now comprises a collection of county roads, city streets, and state highways that follow the general course of early wagon roads between Umatilla and the Blue Mountains. At its nearest point, the road is located approximately 6.5 kilometers (4.0 miles) east of the power plant site.

3.8.1.3 *Visual Characteristics of the Project Site*

The project site consists of four geographic areas described below.

Power Plant Site: The power plant would be constructed on a flat, open, disturbed area in the southeast corner of the Westland Road interchange on I-82. The elevation of the power plant site is 171 meters (560 feet) above mean sea level. Vegetation on the site consists primarily of non-native grasses interspersed with some native grasses and small shrubs. There are no large trees at the power plant site.

Railroad tracks parallel the southern boundary of the proposed power plant site, 1.2 kilometers (0.75 miles) north of I-84. I-82 abuts the western boundary of the site. Lamb Road and the Westland-McNary Transmission Line parallel the northern boundary of the site. Westland Road forms the eastern boundary of the site. The Hermiston Generating Plant and Lamb-Weston plant complex are dominant features in the landscape to the east of the site.

Gas Pipeline Right-of-Way: The power plant would be fueled by natural gas from the existing PG&E Gas Transmission-Northwest (“PG&E GTN”) pipeline that passes approximately five miles (eight kilometers) south of the power plant site. A new pipeline lateral would be built from the power plant site to the PG&E GTN line. The pipeline would be placed underground. Construction of the preferred pipeline route may temporarily remove about 12 hectares (30 acres) of land from agricultural use, depending on the season in which construction occurs. Construction of the pipeline is expected to take three to four months. Once construction is completed, the pipeline would be covered and agricultural lands would be returned to production.

Transmission Line Right-of-Way: The proposed project would include reconductoring the Westland-McNary electric power transmission line between the Hermiston

Generating Plant and the McNary Substation. An existing 115 kV transmission line would be replaced by a new 230 kV line carried on the existing towers. The changes as a result of line replacement would be invisible to most observers, and so this element of the project was not analyzed in detail for potential visual impacts.

Short segments of new transmission line on new towers would be constructed at the power plant and at the McNary Substation.

Water Supply and Reclaimed Water Right-of-Way: A water supply pipeline and a wastewater pipeline would be constructed between the Umatilla Generating Project and the Hermiston Generating Plant. A new 46-centimeter (18-inch) diameter water supply line would be built from the end of the existing 61-centimeter (24-inch) diameter line to the proposed power plant. The water supply pipeline extension would be approximately 0.8 kilometers (0.5 mile) long and would parallel the Union Pacific rail line for most of its length. The reclaimed water pipeline would be constructed in the same corridor as the water supply pipeline. The reclaimed water pipeline would convey blowdown water to the Hermiston Generating Plant, where it would be transported to Madison Farms in the Hermiston Generating Plant's reclaimed water pipeline.

Both the reclaimed water and water supply pipelines would be placed underground. Currently, there are no designs which locate any above-ground structures for the water pipelines.

3.8.2 Environmental Consequences and Mitigation Measures

The viewshed analysis method which assesses the visibility of the proposed project from key observation points was used to assess the visual impact of the proposed project. Key observation points (KOPs) are viewing locations identified as the most representative, visually sensitive areas that would view the proposed project. The analysis of the KOPs included identification and photo documentation of specific viewpoints, classification of visual sensitivity of specific viewpoints, and description of the visibility of the proposed project from the specific viewpoints. The KOPs were identified based upon available land use data, public and agency input, and field review of the project area. The visual sensitivity for each of the KOPs is a measure of the degree of concern for change in the visual character of the landscape. This analysis considered only KOPs with high or moderate sensitivity, since low sensitivity viewers would likely not represent significant impact resulting from the proposed project. The following KOPs were identified within the project area.

- Communities of Hermiston and Westland, including rural residences surrounding these communities (high sensitivity)

- Interstates 82 and 84 (moderate sensitivity)
- Westland Road (moderate sensitivity)

The proposed project would add industrial features into an existing landscape where industrial and agribusiness uses are already an important visual component. No existing large trees would be removed. Industrial and agribusiness use of the area around the proposed project can be expected to intensify in the future because the area is designated for industrial and agribusiness use in local land use plans. Consequently, the proposed power plant and its related and supporting features represent an insignificant impact to the visual quality and aesthetics of the area.

Impact 3.8.1 Elements of the power plant can be seen up to two miles away.

Site reconnaissance indicates the proposed power plant would be most visible at distances within 3.2 kilometers (two miles) of its site. At distances greater than two miles, the power plant would be in the background, would blend with other similar features in the area and would be too distant to constitute a significant feature in the viewshed.

The proposed power plant would consist of two combustion turbine generator enclosures (CTGs) approximately 15 meters (50 feet) tall, two heat recovery steam generators (HRSGs) approximately 26 meters (85 feet) tall, exhaust stacks approximately 65 meters (213 feet) tall, several buildings and structures ranging in height from approximately 13 meters to 20 meters (41 feet to 65 feet), storage yards and parking facilities. The stacks would be visible from the major roadways within the project area and from nearby residences. The rest of the power plant structures would be primarily visible from Lamb Road and I-82. Other visible features associated with the proposed power plant would include vapor plumes and night lighting. Figure 3.8.1 shows where the viewpoints for the visual simulation analysis are in relation to the power plant site and Figures 3.8.2 and 3.8.3 illustrate existing and proposed (simulated) views of the power plant site from these two viewpoints.¹

There are three residences located within 1.21 kilometers (0.75 mile) of the power plant site. The first residence is located 0.40 kilometers (0.25 mile) to the south, and the second is kilometers (0.25 mile) of a mile east/southeast of the site. Views from these residences are partially screened by several buildings that are located between the residences and the proposed power plant site. The third residence is located 1.21 kilometers (0.75 mile) to the northeast of the proposed power plant site. Views from this residence are primarily

¹ Note that the simulations were performed prior to lengthening the footprint for cooling towers from 122 meters to 152 meters (400 feet to 500 feet) and adding a water storage tank to the plant design. Because these changes were small, the visual simulation specialist does not expect that these site design changes would result in any change in the outcome of the visual impact analysis presented here.

open, with the exception of partial screening due to seasonal agricultural fields. However, the Westland-McNary transmission line is located between the residence and site and dominates views to the south. Additionally, the Hermiston Generating Plant and other industrial/agribusiness facilities are prominent features visible from these residences.

The most visible features of the proposed power plant would be the HRSGs and the exhaust stacks. Impacts to the residences referenced above would be moderate and less than significant due to low visual quality of this industrial setting. Additional residences along Westland Road and south of I-84 would have more distant partially screened views of the proposed power plant. Impacts to distant residential views would be low and less than significant since the proposed power plant would be slightly noticeable to not noticeable in the landscape among several adjacent industrial facilities.

Vehicular travelers would view the proposed power plant from a distance of less than two miles as they transit Interstate 84, Interstate 82, and Westland Road. Due to the relatively high speeds at which motorists travel along these roads, their views of the power plant would be brief and in context of a moving view of the landscape, which includes other prominent industrial features. The proposed power plant would be most noticeable to travelers on Westland Road where traffic is slower and on I-82 where the viewer is close to the power plant and elevated above it on the railroad overpass (see Figure 3.8.2). The stacks at the proposed power plant would be visible to eastbound traffic on I-84 approaching the I-82 interchange and westbound traffic on I-84 approaching the Westland Road interchange. Impacts to viewers on I-82 and Westland Road would be moderate for viewers in close proximity to the power plant and low for more distant views from these roads. Impacts to views from I-84 would be low since they are more distant and the power plant would tend to blend in with the existing industrial setting.

Night lighting of the proposed power plant would increase its visibility during nighttime hours. Some night lighting is necessary for safety reasons. However, directive and shielding devices would be employed to eliminate off-site glare, and certain lights needed only for infrequent maintenance or emergencies would normally be turned off.

Vapor plumes emanating from the cooling towers and exhaust stacks would be visible during periods of low temperature and high humidity. The plumes would be more likely to be visible during the winter. Vapor plumes may also be visible during nighttime hours when the plant is illuminated. Currently there are visible vapor plumes emanating from several other industrial/agribusiness uses in the area, including the Hermiston Generating Plant.

In summary, the vapor plumes and night lighting would add to the overall visibility of the proposed power plant but would not significantly alter the visual character of this already industrial area. The proposed power plant would not be visible from either of the scenic areas designated in the Umatilla County Comprehensive Plan, the Umatilla County Scenic-Historic Road and the McNary Lock and Dam.

The following features would be incorporated into the proposed power plant to reduce its visual impacts:

- Structures at the power plant site would be painted in neutral colors.
- To minimize visibility of the proposed power plant from sensitive views, it would have a non-reflective (non-specular) finish and would be painted in neutral tones to reflect the surrounding environment.
- Directive and shielding devices would be used on all lights to minimize off-site glare. Where possible, lights would remain off except during infrequent emergency or maintenance situations.

Recommended Mitigation Measures No measures beyond those included in the proposed project are recommended.

Impact 3.8.2 Construction of the proposed project would have some short-term affects on visual quality.

Construction of the proposed power plant, gas pipeline, water pipelines, and new transmission towers would have short-term impacts on visual quality. These impacts would result from equipment such as cranes, scaffolding, etc., being visible for extended periods of time. Additional impacts may occur from dust and construction lighting. However, mitigation including removing equipment when not in use, applying water to the site to control dust, and using shielding and directive devices on lighting during nighttime construction is expected to reduce the impacts to lower than significant levels.

Recommended Mitigation Measures No measures beyond those included in the proposed project are recommended.

Impact 3.8.3 New transmission line on new towers may affect visual quality.

Several hundred feet of new transmission line and up to six new poles would be needed to connect the switchyard at the proposed power plant to the Westland-McNary

transmission line. Most of the new poles would be within the proposed power plant site. Visual impacts of the new transmission line would be insignificant, because the new line would be adjacent to new and existing industrial facilities and in an area with many existing above-ground electric power transmission lines.

Approximately 0.8 kilometer (0.5 mile) of new transmission line carried on as many as seven new poles would be needed to convey power from the Westland-McNary transmission line to one of the currently vacant bays at the McNary Substation. The new towers are located in an area where many transmission lines converge on the McNary Substation. The effect of the new towers on visual quality would be minimal because the area is already dominated by transmission lines and transmission towers. The new towers and transmission line may be visible to visitors to the McNary Dam and Lock Scenic Area, but they would have no adverse effect on its aesthetic quality. McNary Lock and Dam, a large-scale engineering feature, is the reason the scenic area was established. The new transmission line would be visually compatible with the dam, the lock and the many associated existing electric power transmission lines.

Recommended Mitigation Measures No measures beyond those included in the proposed project are recommended.

3.8.3 Cumulative Impacts

The proposed project would add a large industrial structure to a local landscape already dominated by several other large industrial structures, including the Hermiston Generating Plant, the Lamb-Weston potato processing plant and a number of potato sheds. These structures are within one mile of the proposed project site. At times, the proposed project would emit a visible steam plume from its cooling towers. Similar plumes are emitted by the cooling towers at the Hermiston Generating Plant and the Lamb-Weston facility. Because the lands surrounding the proposed project site are zoned for commercial and industrial use it can be expected that other large industrial structures will be built in the future. The proposed project, viewed together with other existing industrial facilities and those that will be built in the future, would cumulatively create an increasingly dense industrial landscape close to the intersection of Interstate Highways 82 and 84.